IN THE SPECIFICATION:

On page 1, line 1, amend the title as follows:

APPARATUS ~~AND METHOD~~ FOR MANAGING AN INTEGRATED CIRCUIT

On page 6, amend the paragraph at lines 5-12 as follows:

FIG.4 illustrates a graph of temperature versus time for thermal sensors 41-44 (see FIGS. 2 and 3). In order to ~~generated~~ <u>generate</u> the graph illustrated in FIG. 4, a predetermined power is applied at the location of each of thermal sensors 41-44. A parameter of thermal sensors 41-44 is then measured, such as the voltage at node 72 (see FIG.3), in order to determine the temperature of the semiconductor die 10 at the location of each thermal sensor 41-44.

On page 7, amend the paragraph at lines 16-24 as follows:

Although semiconductor die 10 has been illustrated as having a plurality of identical thermal ~~senses~~ <u>sensors</u> 41-44 (see FIG.3), alternate embodiments of the present invention may use the same or different circuitry to implement any number of thermal sensors on semiconductor die 10. Thus all, some, or none of the thermal sensors on a semiconductor die 10 may use the same circuit. Similarly, all, some, or none of the thermal sensors on a semiconductor die 10 may use the same physical layout.

On pages 12-13, amend the paragraph starting at line 27 of page 12 and extending to line 19 of page 13 as follows:

Still referring to FIG. 4, note that if a series of voltage values from thermal sensors 41-44 are made over a several millisecond period of time, it is possible to effectively determine the thermal resistance between semiconductor die 10 and heatsink 14, and between heatsink 14 and printed circuit board/heatsink 18, as well

as the possibly faulty area (see FIG. 1). The manner in which this is done will now be described. The time required for heat to transfer within semiconductor die 10, within solder 12, within copper heatsink 14, within solder 16, and within heatsink 18 is known based on the materials forming these compounds. Using the calculated temperature at the locations of thermal sensors 41-44 over a period of time (i.e. several milliseconds) it is possible to determine the thermal resistance of the various layers of solder 12, heatsink 14, solder 16 and heatsink 18. If the thermal resistance of a particular layer or interface is much higher than expected, it is likely that there is a void in the solder between those two layers. It is thus possible to determine, from the value of the thermal sensor (e.g. 41) at a particular location whether there is a void in one or more of the underlying solder layers 12, 16, and if so, which solder layer(s) in fact have the void.

On page 18, line 4, amend the title as follows:

APPARATUS ~~AND METHOD~~ FOR MANAGING AN INTEGRATED CIRCUIT

On page 18, lines 7-18, amend the abstract of the disclosure as follows:

An apparatus for an integrated circuit comprising a thermal sensor (41-44), an A-D converter (58) coupled to the thermal sensor, wherein the thermal sensor provides an input to the A-D converter, and the A-D converter converts the input to a digital value representative of the thermal environment of the thermal sensor. ~~A method for an~~ The integrated circuit ~~comprising the steps of collecting~~ collects a data value at a location on an integrated circuit wherein the data value has a predetermined functional relationship to the temperature at the location.~~;~~ The integrated circuit converts ~~converting~~ the data value to a value representative of the thermal environment of the location on the integrated circuit.